

WHAT IS CLAIMED IS:

1. A laser beam projector comprising:
an optical head of projecting a laser beam; and
a holding-turning mechanism of holding and turning the optical head.

2. The laser beam projector according to claim 1, wherein the holding-turning mechanism holds the optical head so that the optical head is able to turn about an axis passing a center of gravity of the optical head.

3. The laser beam projector according to claim 1, wherein the holding-turning mechanism includes a first holding-turning unit of turning the optical head in a direction perpendicular to a weld line and a second holding-turning unit of turning the optical head in a direction of the weld line.

4. The laser beam projector according to claim 2, wherein the holding-turning mechanism includes a first holding-turning unit of turning the optical head in a direction perpendicular to a weld line and a second holding-turning unit of turning the optical head in a direction of the weld line.

5. The laser beam projector according to claim 1, wherein the holding-turning mechanism includes a turning link mechanism of transmitting a driving force to the optical head in order to turn the optical head.

6. The laser beam projector according to claim 2, wherein the holding-turning mechanism includes a turning link mechanism of transmitting a driving force to the optical head in order to turn the optical head.

7. The laser beam projector according to claim 3, wherein the holding-turning mechanism includes a turning link mechanism of transmitting a driving force to the optical head in order to turn the optical head.

8. The laser beam projector according to claim 4, wherein the holding-turning mechanism includes a turning link mechanism of transmitting a driving force to the optical head in order to turn the optical head.

9. The laser beam projector according to claim 1, wherein the optical head emits a YAG laser beam.

10. A robot comprising:

an robot arm; and

a laser beam projector attached to the robot arm, the laser beam projector including an optical head of projecting a laser beam and a holding-turning mechanism of holding and turning the optical head.

11. The robot according to claim 10, wherein the holding-turning mechanism holds the optical head so that the optical head is able to turn about an axis passing a center of gravity of the optical head.

12. The robot according to claim 10, wherein the holding-turning mechanism includes a first holding-turning unit of turning the optical head in a direction perpendicular to a weld line and a second holding-turning unit of turning the optical head in a direction of the weld line.

13. The robot according to claim 11, wherein the holding-turning mechanism includes a first holding-turning unit of turning the optical head in a direction perpendicular to a weld line and a second holding-turning unit of turning the optical head in a direction of the weld line.

14. The robot according to claim 10, wherein the holding-turning mechanism includes a turning link mechanism of transmitting a driving force to the optical head in order to turn the optical head.

15. The robot according to claim 11, wherein the holding-turning mechanism includes a turning link mechanism of transmitting a driving force to the optical head in order to turn the optical head.

16. The robot according to claim 12, wherein the holding-turning mechanism includes a turning link mechanism of transmitting a driving force to the optical head in order to turn the optical head.

17. The robot according to claim 13, wherein the holding-turning mechanism includes a turning link mechanism of transmitting a driving force to the optical head in order

18. The robot according to claim 10, wherein the optical head emits a YAG laser beam.